

Title (en)

DEVICE AND METHOD FOR MEASURING ENGINE TORQUE, AND CONTROL PROGRAM

Title (de)

VORRICHTUNG UND VERFAHREN ZUR MOTORDREHMOMENTMESSUNG UND STEUERPROGRAMM

Title (fr)

DISPOSITIF ET PROCÉDÉ POUR MESURER LE COUPLE MOTEUR, ET PROGRAMME DE COMMANDE

Publication

EP 2314998 B1 20160629 (EN)

Application

EP 09803015 A 20090730

Priority

- JP 2009063565 W 20090730
- JP 2008198498 A 20080731

Abstract (en)

[origin: EP2314998A1] Output (torque) characteristics of each cylinder are estimated with a simple arrangement. A device for measuring torque of an engine is provided with a torque detecting section (4) for detecting, as a signal, an output torque of the engine having cylinders, a rotation detecting section (3) for detecting a rotation angle of a rotating section to which a piston of each cylinder is connected in the engine, a top mark detecting section (2) for detecting the rotation angle of the piston of each cylinder, and a torque calculating section (10) for estimating torque characteristics of each cylinder on the basis of the following: the signal of the output torque detected by the torque detecting section (4), the rotation angle of the rotating section detected by the rotation detecting section (3), the rotation angle of the piston of each cylinder detected by the top mark detecting section (2), the number of the cylinders of the engine, and the number of cycles of the engine. The torque calculating section (10) estimates, as torque characteristics of each cylinder, either peak torque of each cylinder or the combustion angle at which the peak torque is attained.

IPC 8 full level

G01M 15/04 (2006.01); **G01L 3/14** (2006.01); **G01L 3/16** (2006.01); **G01L 3/24** (2006.01)

CPC (source: EP KR US)

G01L 3/1478 (2013.01 - EP US); **G01L 3/16** (2013.01 - KR); **G01L 3/242** (2013.01 - EP US); **G01M 15/04** (2013.01 - KR);
G01M 15/044 (2013.01 - EP US)

Designated contracting state (EPC)

AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO SE SI SK SM TR

DOCDB simple family (publication)

EP 2314998 A1 20110427; EP 2314998 A4 20150304; EP 2314998 B1 20160629; CN 102124316 A 20110713; CN 102124316 B 20130911;
JP 5297459 B2 20130925; JP WO2010013773 A1 20120112; KR 20110046509 A 20110504; US 2011130942 A1 20110602;
US 8695408 B2 20140415; WO 2010013773 A1 20100204

DOCDB simple family (application)

EP 09803015 A 20090730; CN 200980127558 A 20090730; JP 2009063565 W 20090730; JP 2010522751 A 20090730;
KR 20117004508 A 20090730; US 200913056162 A 20090730